

AMENDMENTS TO THE CLAIMS

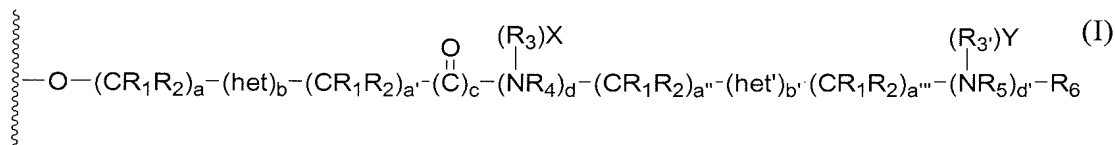
This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A chromatographic material comprising:

- (a) a terminal binding functionality;
- (b) a hydrophobic linker comprising at least one functionality that is different from the terminal binding functionality; and
- (c) a solid support,

wherein

the hydrophobic linker links the terminal binding functionality to the solid support; and the chromatographic material is capable of binding bovine albumin at physiological ionic strength, wherein the chromatographic material has the following general formula I:



wherein

R_1 , R_2 , R_4 , and R_5 , at each occurrence, are independently selected from the group consisting of H, C_{1-6} -alkyl, C_{1-6} -alkoxy, C_{1-6} -alkyl- C_{1-6} -alkoxy, aryl, C_{1-6} -alkaryl, $\text{---NR}'\text{C}(\text{O})\text{R}''$, $\text{---C}(\text{O})\text{NR}'\text{R}''$, and hydroxy,

wherein R' and R'' are independently selected from C_{1-6} -alkyl, and

wherein no more than one of R_1 and R_2 is hydroxy;

R_6 is selected from the group consisting of H, C_{1-6} -alkyl, aryl, C_{1-6} -alkaryl, $\text{---C}(\text{O})\text{OH}$, $\text{---S}(\text{O})_2\text{OH}$, and $\text{---P}(\text{O})(\text{OH})_2$;

R_3 and R_3' , together with X and Y, respectively, may independently be absent or present,

and if present, then R_3 and R_3' are independently selected from the group

consisting of H, C_{1-6} -alkyl, C_{1-6} -alkoxy, C_{1-6} -alkyl- C_{1-6} -alkoxy, aryl, and C_{1-6} -alkaryl,

wherein X and Y, independently of each other, represent anions;

~~het and het' are heteroatom moieties independently selected from the group consisting of O, S, S(O), and S(O)₂;~~

a is 3;

~~a, a', a'', and a'''~~ are independently selected from the integers 0 through 6;

b and b' are both independently 0 or 1;

c is ~~0 or 1, and if c is 1, then (R₂)X is absent;~~

d is 1;

d' is 0;

~~d and d' are independently 0 or 1; and~~

the wavy line represents the solid support.

2-6. (Canceled).

7. (Withdrawn – Currently Amended) The chromatographic material according to claim 1 ~~6~~, wherein at least one ~~two~~ of ~~a, a', a'', and a'''~~ is ~~are~~ 3.

8-29. (Canceled).

30. (Currently Amended) The chromatographic material according to claim 1 ~~29~~, wherein R₆ is H, C₁₋₆-alkyl, aryl, or C₁₋₆-alkaryl.

31. (Original) The chromatographic material according to claim 30, wherein R₆ is selected from C₁₋₆-alkyl and aryl.

32. (Withdrawn) The chromatographic material according to claim 31, wherein R₆ is phenyl.

33. (Withdrawn) The chromatographic material according to claim 31, wherein one of a'' and a''' is 1 and the other is 1 or 2.

34. (Withdrawn – Currently Amended) The chromatographic material according to claim 1 ~~29~~, wherein R₆ is -C(O)OH, -S(O)₂OH, and -P(O)(OH)₂.

35. (Withdrawn) The chromatographic material according to claim 34, wherein one of a'' and a''' is 1 and the other is 1 or 2.

36-48. (Canceled).

49. (Withdrawn – Currently Amended) The chromatographic material according to claim 1, wherein

~~a or a' is 3, the other being 0; and~~

~~a'' or a''' is 3;~~

~~each of b, b', and c is 0; and~~

~~d is 1.~~

50-51. (Canceled).

52. (Currently Amended) ~~The~~ A chromatographic material comprising: according to claim 1,

(a) a terminal binding functionality;

(b) a hydrophobic linker comprising at least one functionality that is different from the terminal binding functionality; and

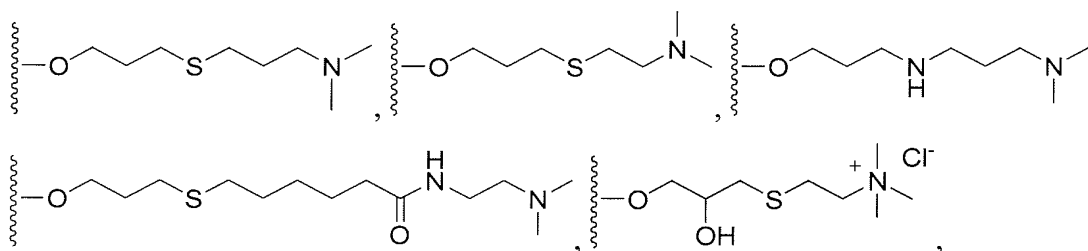
(c) a solid support,

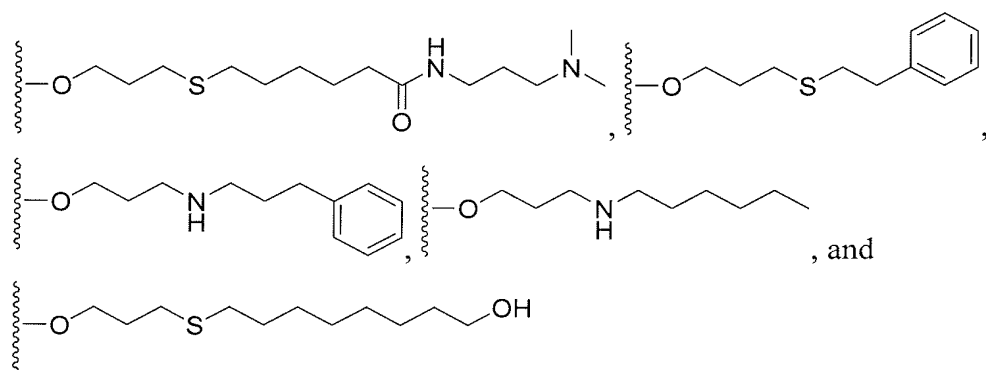
wherein

the hydrophobic linker links the terminal binding functionality to the solid support;

and the chromatographic material is capable of binding bovine albumin at

physiological ionic strength, wherein the chromatographic material has a formula selected from the group consisting of:





53. (Original) The chromatographic material according to claim 1, wherein the wherein the solid support is an organic material.

54. (Original) The chromatographic material according to claim 53, wherein the organic material is one selected from the group consisting of cellulose, agarose, dextran, polyacrylates, polystyrene, polyacrylamide, polymethacrylamide, copolymers of styrene and divinylbenzene, and mixtures thereof.

55. (Withdrawn) The chromatographic material according to claim 1, wherein the solid support is an inorganic material.

56. (Withdrawn) The chromatographic material according to claim 55, wherein the inorganic material is one selected from the group consisting of silica, zirconia, alumina, titania, ceramics, and mixtures thereof.

57. (Original) The chromatographic material according to claim 1, wherein the solid support is in the form of a bead or particle.

58. (Withdrawn) The chromatographic material according to claim 1, wherein the solid support is a planar solid support.

59. (Withdrawn) The chromatographic material according to claim 58, wherein the chromatographic material is in the form of a biochip.

60. (Withdrawn) The chromatographic material according to claim 59, wherein the solid support is selected from the group consisting of a metal, metal oxide, silicon, glass, a polymer, and a composite material.

61. (Withdrawn) The chromatographic material according to claim 59, wherein a multitude of terminal binding functionalities and the hydrophobic linkers to which the terminal binding functionalities are linked are segregated into a plurality of addressable locations on the solid support.

62. (Withdrawn) The chromatographic material according to claim 59, wherein the biochip is a mass spectrometer probe.

63. (Withdrawn) The chromatographic material according to claim 61, wherein at least two different addressable locations comprise the same terminal binding functionality and hydrophobic linker.

Claims 64-98 (Canceled).

99. (Previously Presented) The chromatographic material of claim 1, wherein

R_1 , R_2 , R_4 , and R_5 , at each occurrence, are independently selected from the group consisting of H, C_{1-6} -alkyl, C_{1-6} -alkoxy, C_{1-6} -alkyl- C_{1-6} -alkoxy, $-NR'R''$, $-C(O)NR'R''$, and hydroxy,

wherein R' and R'' are independently selected from C_{1-6} -alkyl, and

wherein no more than one of R_1 and R_2 is hydroxy; and,

R_6 is selected from the group consisting of H, C_{1-6} -alkyl, $-C(O)OH$, $-S(O)_2OH$, and $-P(O)(OH)_2$.

100. (Previously Presented) The chromatographic material of claim 1, wherein

R_6 is selected from the group consisting of C_{1-6} -alkyl, $-C(O)OH$, $-S(O)_2OH$, and $-P(O)(OH)_2$.

101. (Canceled).

102. (Currently Amended) The chromatographic material of claim 1, wherein

~~a is 3;~~

a'' is 0 or 3;

~~d is 1;~~

a', and a''', ~~b, b', c, and d~~ are both ~~all~~ 0;

(R₃)X is absent;

each R₁, R₂, and R₄, is H; and

R₆ is selected from the group consisting of C₁₋₆-alkyl and aryl.

103. (Currently Amended) The chromatographic material of claim 1, wherein

~~a is 3;~~

~~d is 1;~~

a', a'', and a''', ~~b, b', c, and d~~ are all 0;

(R₃)X is absent;

each R₁, R₂, and R₄, is H; and

R₆ is selected from the group consisting of C₁₋₆-alkyl.

104. (Withdrawn – Currently Amended) The chromatographic material of claim 1, wherein

~~a is 3;~~

a'' is 3;

~~d is 1;~~

a', and a''', ~~b, b', c, and d~~ are both ~~all~~ 0;

(R₃)X is absent;

each R₁, R₂, and R₄, is H; and

R₆ is selected from the group consisting of aryl.

105. (New) The chromatographic material of claim 103, wherein R₆ is C₆-alkyl.